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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/576,610  | 04/21/2006  | Toshio Yamauchi      | 0969-0187PUS1       | 2059             |
| 2292 7590 12/22/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALL COLUMN CH. VA 22040 0747 |             |                      | EXAMINER            |                  |
|   |             |                      | MORGAN, EMILY M     |                  |
| FALLS CHURCH, VA 22040-0747   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3677                |                  |
|   |             |                      |                     |                  |
|   |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|   |             |                      | 12/22/2008          | ELECTRONIC       |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

|  | Application No.   | Applicant(s)                 |  |  |  |  |
|--|---|------------------------------|--|--|--|--|
| Office Action Comments   | 10/576,610  | YAMAUCHI, TOSHIO             |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit                     |  |  |  |  |
|  | EMILY M. MORGAN   | 3677                         |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c  | orrespondence address        |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                              |  |  |  |  |
| Status   |   |                              |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>30 Se</u>   | eptember 2008.  |                              |  |  |  |  |
|  |   |                              |  |  |  |  |
| ·=   |   | secution as to the merits is |  |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                              |  |  |  |  |
| ciocoa in accordance with the practice and E   | x parte quayre, 1000 0.D. 11, 10  | 0.0.210.                     |  |  |  |  |
| Disposition of Claims  |   |                              |  |  |  |  |
| <ul> <li>4) Claim(s) 1.3-9.11.12 and 14-17 is/are pending in the application.</li> <li>4a) Of the above claim(s) 3-9.11.12.15 and 17 is/are withdrawn from consideration.</li> <li>5) Claim(s) is/are allowed.</li> <li>6) Claim(s) 1.and 16 is/are rejected.</li> <li>7) Claim(s) is/are objected to.</li> <li>8) Claim(s) are subject to restriction and/or election requirement.</li> </ul>   |   |                              |  |  |  |  |
| Application Papers   |   |                              |  |  |  |  |
| <ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☐ The drawing(s) filed on 21 April 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>  |   |                              |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                              |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |   |                              |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date   | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa 6)  Other:  | ite                          |  |  |  |  |

#### **DETAILED ACTION**

#### Election/Restrictions

Newly amended claim 14 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claim 14 includes protrusions, part 43, which applicant has presented in figures 19-21 (disclosed in [0150]) and figures 39-42 (disclosed in [0169]). None of these figures have been previously elected, since they are not present in the elected species A illustrated in figure 1, or subspecies 1 illustrated in figure 54, as chosen by applicant in the response to restriction.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 14 and its dependant claim 17 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Two wheeled caster having a Linked Belt", or something including information about having two wheels, a belt, or the non-caving aspect of the belt.

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# Claim Objections

Claim 1 is objected to because of the following informalities: Applicant claims in amended paragraph 4 "when viewed in a side view which is a view in a direction of an axis of rotation of each of the wheels". Examiner finds this wordy and non-descriptive. Examiner suggests "when viewed along an axis of rotation of the wheels" or "when viewed from the side". Examiner would find either an appropriate correction, since applicant has already demonstrated the front, labeled in figure 1. Appropriate correction is required.

Claim 1 is objected to because of the following informalities: Applicant claims in amended paragraph 5 that the connecting members (part 34) include an inclined surface section (part 35). The inclined surface is disclosed in figure 5 to be on the contacting section 36 or the guide wall 30, and not located on the connecting member 34. Examiner will assume this is a typo, and meant to be the contacting section part 36.

Claim 1 is objected to because of the following informalities: Applicant claims in amended paragraph 8 that "connecting portions" are provided between the contacting section 36 and the guide wall 30. Since the disclosure does not mention a "connecting portion", Examiner will assume that the applicant intended "connecting section" part 29, which is located between the guide wall 30 and contacting portion 36, as suggested by figure 6.

Claim 1 is objected to because of the following informalities: Applicant claims in amended paragraph 9 that connecting members 34 go through the connecting portions

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provided in each piece. Since the disclosure does not mention a "connecting portion", examiner will assume applicant meant "connecting hole" 33, as suggested in figure 5.

### **Drawings**

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The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connecting portions of the last two paragraphs of claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filling date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

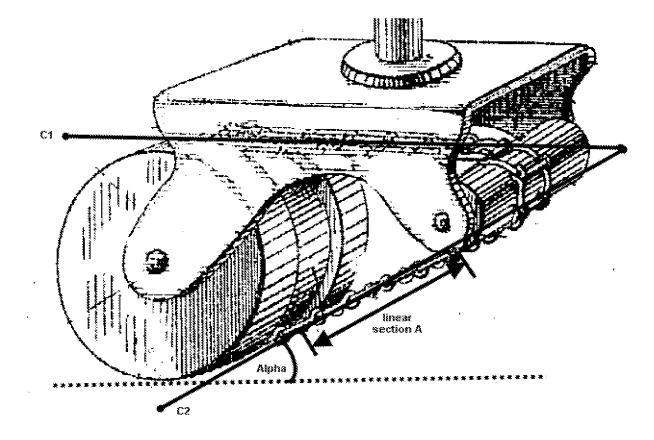
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over patent 1066754 to Rison in view of patent 4752105 to Barnard.

Regarding claim 1, Rison discloses a caster (figure, shown below) comprising: first 19 and second 21 wheels disposed forward and back and an endless wrap-around member 22 wrapped around the first 19 and second 21 wheels, the first and second wheels having common tangents C1 and C2, the common tangent C2 having an angle (alpha) with respect to a ground surface, wherein the wraparound member 22 is a continuous endless belt formed by connecting a plurality of pieces (links, line 56) via a plurality of connecting members, the wraparound member having a linear portion A formed along at least the common tangent C2 of the wheels (all shown below). Rison does not disclose the specified structure of the wraparound member.

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Barnard discloses wrap around tread (figure 2) wherein the tread is made of pieces 40 independently formed as a body having a connecting section 39 (figure 8) that faces the adjacent pieces of either side thereof, a contacting section 40.3 and 40.4 on an outer peripheral side (figure 4) of the connecting section 39, and a guide wall 12.2 on an inner peripheral side of the connecting section 39 (figure 3), and when viewed along an axis of rotation of the wheels, each of the contacting sections is seen as a linear section that extends parallel to the contacting sections of the adjacent pieces (figure 2), and that is perpendicular to the linear portion A of the common tangent C2 of the wheels (each piece is seeming perpendicular to the linear length between the two wheels, figure 2), wherein each of the guide walls 12.2 on the inner peripheral side of the contacting section 39 includes an inclined surface section (creating acute angle 48),

the inclined surface section being adapted to form a groove that is substantially V-shaped between each of the adjacent pieces (figure 2), thereby enabling the wraparound member to bend along an outer periphery of each of the first and second wheels (figure 2), wherein connecting sections 39 are provided between the contacting section 40.3 and 40.4 and the guide wall 12.2 of each of the pieces, and wherein the plurality of pieces 40 are connected by the plurality of connecting members (wires 41, figure 3) which extend, respectively, through the connecting hole 43 provided in each of the pieces.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the treads of Barnard in place of the links of Rison, motivated by the desire to further enable the caster of Rison to carry itself over inequalities In the floor (line 13) just as Barnard uses the tread to go over obstacles in the land. Rison also discloses that other flexible members may be applicable to the caster disclosed 9lines 55-60). This would be an easy exchange from links to the Barnard tread in that the wheels of Rison are centrally grooved, which would accommodate the central guide pieces of Barnard.

Since the contacting sections of the adjacent pieces abut respectively against each other along a linear portion (shown in figure 2), when the pieces are applied to the Rison caster, the effect would be the same along the linear portion of tangent C2. The Barnard applied tread along the linear portion A of the common tangent C2 is capable maintaining a linear condition and is prevented from being dented, so that even when the linear portion A is pushed by a force from an outside, the linear portion A is capable

of serving as an anti-sticking plate. This is done because the pressure faces are adapted in Barnard to prevent reverse bending of the track member (column 1, line 43).

Regarding claim 16, Rison as modified discloses the caster according to claim 1, wherein the connecting members (wires of Barnard) extend in a direction perpendicular to the direction of the axis of rotation of each of the wheel. The wires extend around the edges of the wheels, which is perpendicular to the axis of rotation about the wheel.

# Response to Arguments

Applicant's arguments filed 9/30/2008 have been fully considered but they are not persuasive.

Regarding the previous rejection over "the surface of rotation", since applicant has omitted the phrase from the amended claims, the rejection is no longer applicable.

Regarding the Barnard reference, the pieces are connected with steel wire ropes. Since the shape of the pieces are a large factor in the inability to "dent", and Barnard depicts the shape disclosed by applicant, Barnard is certainly *capable* to prevent a dent, as applicant has claimed in claim 1. This would be possible at the initial assembly, before the steel wire is able to stretch.

Regarding the Rison reference, Rison is primarily used for the shape of the caster, not the functionality of the tread pieces. Rison also states in lines 55-60 that the invention is not limited to the links disclosed in the patent.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY M. MORGAN whose telephone number is (571)270-3650. The examiner can normally be reached on Monday-Thursday, alternate Fri, 7:30am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on 571-272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor Batson/ Supervisory Patent Examiner, Art Unit 3677

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